Application No. 77854

APPLICATION FOR PERMIT TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

THIS SPACE FOR OFFICE USE ONLY

Date of filing in State Engineer's Office JAN 20 2009

Returned to applicant for correction _____

Corrected application filed _____ Map filed JAN 20 2009 under 77851 sht 2 of 3

The applicant United States of America, U. S. Department of Energy

1551 Hillshire Drive (Street Address or P.O. Box) of Las Vegas (City or Town)

Nevada 89134 (State and Zip Code) hereby make(s) application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association give names of members.)

1. The source of water is Underground (HC-4)
   Name of stream, lake, underground, spring or other sources.
2. The amount of water applied for is 1.0 cfs not to exceed 354 acre-feet per year (See Attachment A) second feet.
   One second foot equals 448.83 gallons per minute.
   (a) If stored in reservoir give number of acre-feet _____
3. The water to be used for Construction (See Attachment A)
   Irrigation, power, mining, commercial, domestic or other use. Must limit to one major use.
4. If use is for:
   (a) Irrigation, state number of acres to be irrigated _____
   (b) Stockwater, state number and kind of animals _____
   (c) Other use (describe fully in No. 12.) _____
   (d) Power:
      (1) Horsepower developed _____
      (2) Point of return of water to stream _____

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5. The water is to be diverted from its source at the following point: (Describe as being within a 40-acre subdivision of public survey, and by course and distance to a found section corner. If on unsurveyed land, it should be so stated.)

Within the SE ¼ NW ¼ of Section 14, T.3N., R.50E., M.D.B. & M. (unsurveyed), or at a point from which the southeast corner of Section 32, T.4N., R.50E., M.D.B. & M., bears N. 0° 21' 14" W. a distance of 16,037 feet.

(See Basin 156 Map Sheet 2 of 3)

6. Place of use: (Describe by legal subdivision. If on unsurveyed land, it should be so stated.)

See Attachment A and Basin 156 Map Sheet 3 of 3.

7. Use will begin about January 1 (Month and Day) and end about December 31 (Month and Day) of each year.

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) (State manner in which water is to be diverted, i.e. diversion structure, ditches and flumes, drilled well with pump and motor, etc.)

Drilled and cased well, vertical turbine pump and motor, pipeline, and a temporary holding pond of about 100 x 100 x 10 feet deep or smaller.

9. Estimated cost of works: $350,000

10. Estimated time required to construct works: 3 years (If well completed, describe works.)

11. Estimated time required to complete the application of water to beneficial use: 10 years

12. Provide a detailed description of the proposed project and its water usage (use attachments if necessary): (Failure to provide a detailed description may cause a delay in processing.)

See Attachment A (HC-4).

13. Miscellaneous remarks:

The United States of America, U.S. Department of Energy is filing this permit application as a matter of comity.

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E-mail Address

(702) 794-1454
Phone No.

APPLICATION MUST BE SIGNED
BY THE APPLICANT OR AGENT

Ned B. Larson
Type or print name clearly

By _____
Signature, applicant or agent

United States of America, U.S. Dept. of Energy
Company Name

1551 Hillshire Drive
Street Address or P.O. Box

Las Vegas, NV 89134
City, State, Zip Code

2009 JAN 20 AM 10:38

$250 FILING FEE AND SUPPORTING MAP MUST ACCOMPANY APPLICATION

Revised 11-07

Protested: March 17, 2009, by Twin Springs Ranch; April 3, 2009, by the Nevada Agency for Nuclear Projects by and through the Attorney General's Office; April 9, 2009, by Nye County

ATTACHMENT A

Water Appropriation Permit Application Supplemental Information

YMP Well Identifier HC-4:

This application to temporarily appropriate the waters of the State of Nevada is being filed by the United States of America, U.S. Department of Energy (DOE) in order to provide water for meeting the DOE's responsibilities under the Nuclear Waste Policy Act of 1982, as amended. This application is being filed to appropriate water for the construction of a rail line to Yucca Mountain, which will probably take up to 10 years, but may take longer depending on funding and other issues. Once construction is completed the permit will be withdrawn.

Item 2. The total annual duty from 7 points of diversion applied for in Basin 156 will not exceed 354 acre-feet per year. It is anticipated that the total use of water within Basin 156 during the construction period will not exceed 416 acre-feet. An annual duty that is near the maximum anticipated need is requested because it is likely that a large proportion of the total water demand will be used during the first one to two years of construction.

Item 3. Construction uses will include, but are not limited to, geotechnical and hydrological investigations, road construction, facility construction, rail construction, dust suppression, quarry operations, construction camp operations, and other related site uses.

Item 6. The place of use is any portion of Sections that are within one-half mile of the rail alignment, access roads, and facilities within the basin of origin and adjacent basins, as shown in Basin 156 Map Sheet 3 of 3. The place of use is defined as all quarter-quarter sections within the following sections:

T.4N., R.49E., Sections: 25, 26, 34, 35, 36; T.4N., R.49½E., Sections: 25, 26, 27, 34, 35, 36; T.4N., R.50E., Sections: 21, 28, 30, 31, 33; T.3½N., R.50E., Sections: 33, 34, 35, 36; T.3N., R.48E., Sections: 13, 23, 24, 25, 26, 27, 34, 35; T.3N., R.49E., Sections: 2, 3, 4, 5, 7, 8, 9, 17, 18, 19; T.3N., R.50E., Sections: 1, 2, 3, 4, 10, 11, 12, 13, 14, 15, 23, 24, 25, 26, 35, 36; T.2N., R.47E., Sections: 25, 35, 36; T.2N., R.48E., Sections: 3, 4, 8, 9, 10, 16, 17, 18, 19, 20, 30, 31; T.2N., R.50E., Sections: 1, 2, 11, 12, 13, 14, 22, 23, 24, 25, 36; T.2N., R.51E., Sections: 18, 19, 30, 31; T.1N., R.46E., Sections: 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36; T.1N., R.47E., Sections: 1, 2, 3, 10, 11, 15, 16, 20, 21, 22, 28, 29, 30, 31, 32; T.1N., R.50E., Section: 1; T.1N., R.51E., Sections: 6, 7, 8, 17, 18, 20, 21, 27, 28, 29, 33, 34, 35; T.1S., R.51E., Sections: 2, 3, 10, 11, 12, 13, 14, 24, 25, 36; T.1S., R.51½E., Sections: 18, 19, 29, 30, 31, 32; T.1S., R.53E., Sections: 25, 35, 36; T.1S., R.54E., Sections: 19, 30; T.2S., R.51½E., Sections: 4, 5, 6, 7, 8, 9, 16, 17, 18; T.2S., R.52E., Sections: 7, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24; T.2S., R.53E., Sections: 1, 2, 3, 7, 8, 9, 10, 11, 15, 16, 17, 18.

Item 12. The DOE will construct a 333-mile-long railroad from the existing Union Pacific mainline in Caliente, Nevada to Yucca Mountain. That railroad will be used to transport spent nuclear fuel, high-level radioactive waste, and other materials to a geologic repository at Yucca Mountain. The DOE will also allow commercial shippers to use the rail line to ship general freight, subject to obtaining a Certificate of Public Convenience and Necessity from the Surface Transportation Board and other necessary regulatory approvals.

Up to 103 wells will be used along the rail line to obtain the approximately 6,000 acre-feet of groundwater required for construction of the railroad. DOE anticipates that about 90 percent of the water will be needed at some time during the first one to two years of construction for compaction of the rail roadbed and for dust suppression. The remainder of the water will be used throughout the construction phase for the activities described in Item 3 above. It is likely that all wells within a basin will be operated during the six- to twelve-month period when the roadbed is being constructed within a basin. Fewer wells may be operated within a basin, and likely will be pumped at a lower rate, during the remainder of construction.